

## RESFEN Window Library Documentation

ID #	Frame Type	# of glazings	Glazing Description	Gap (inch)	Gas (see Note for Air/Argon)	Total Window U-factor (Btu/hr-ft <sup>2</sup> -°F)	Shading Coefficient (SC)	Total Window Solar Heat Gain Coefficient (SHGC)	Total Window Visible Transmittance (VT)
101	AL	1	Clear	n/a	n/a	1.25	0.89	0.76	0.74
102	AL	1	Bronze	n/a	n/a	1.25	0.76	0.65	0.56
111	AL	2	Clear	0.375	Air	0.79	0.79	0.68	0.67
112	AL	2	Bronze	0.375	Air	0.79	0.66	0.57	0.50
113	AL	2	SS Tint	0.375	Air	0.79	0.55	0.46	0.57
121	AL	2	PY Low-E	0.50	Argon	0.64	0.74	0.64	0.62
131	AL	2	SP Low-E	0.50	Argon	0.61	0.62	0.49	0.62
141	AL	2	SS Low-E	0.50	Argon	0.60	0.43	0.38	0.57
201	ATB	1	Clear	n/a	n/a	1.08	0.81	0.70	0.69
202	ATB	1	Bronze	n/a	n/a	1.08	0.69	0.60	0.52
211	ATB	2	Clear	0.50	Air	0.64	0.72	0.62	0.62
212	ATB	2	Bronze	0.50	Air	0.64	0.60	0.52	0.47
213	ATB	2	SS Tint	0.50	Air	0.64	0.50	0.41	0.53
221	ATB	2	PY Low-E	0.50	Argon	0.52	0.67	0.58	0.57
231	ATB	2	SP Low-E	0.50	Argon	0.49	0.56	0.45	0.58
241	ATB	2	SS Low-E	0.50	Argon	0.48	0.39	0.34	0.53
301	W/V	1	Clear	n/a	n/a	0.90	0.73	0.63	0.64
302	W/V	1	Bronze	n/a	n/a	0.90	0.62	0.54	0.48
311	W/V	2	Clear	0.50	Air	0.49	0.65	0.56	0.58
312	W/V	2	Bronze	0.50	Air	0.49	0.54	0.46	0.44
313	W/V	2	SS Tint	0.50	Air	0.49	0.44	0.37	0.49
321	W/V	2	PY Low-E	0.50	Argon	0.36	0.60	0.52	0.53
331	W/V	2	SP Low-E	0.50	Argon	0.33	0.50	0.40	0.53
341	W/V	2	SS Low-E	0.50	Argon	0.32	0.34	0.30	0.50
351	W/V	3	HT Super	0.50	Argon	0.26	0.44	0.38	0.46
352	W/V	3	SS Super	0.50	Argon	0.24	0.29	0.25	0.40
411	INS	2	Clear	0.50	Air	0.44	0.69	0.59	0.62
412	INS	2	Bronze	0.50	Air	0.44	0.56	0.49	0.47
413	INS	2	SS Tint	0.50	Air	0.44	0.46	0.38	0.53
421	INS	2	PY Low-E	0.50	Argon	0.30	0.64	0.55	0.57
431	INS	2	SP Low-E	0.50	Argon	0.27	0.52	0.42	0.58
441	INS	2	SS Low-E	0.50	Argon	0.26	0.35	0.31	0.53
451	INS	3	HT Super	0.50	Argon	0.18	0.46	0.39	0.49
452	INS	3	SS Super	0.50	Argon	0.17	0.30	0.26	0.43

### NOTES:

#### FRAME TYPE CODES:

- **AL** = Aluminum
- **ATB** = Aluminum, Thermally Broken
- **W/V** = Wood/Vinyl
- **INS** = Insulated Frame

#### GLAZING TYPE CODES:

- **SS** = Spectrally Selective ( $e \approx 0.04$ , low solar gain)
- **PY** = Pyrolytic coating ( $e \approx 0.15 - 0.20$ , high solar gain)
- **SP** = Sputter low-E coating ( $e \approx 0.10$ , moderate solar gain)
- **SS Super** = 3-layer insulating glazing, two layers with Spectrally Selective low-E coatings
- **HT Super** = 3-layer insulating glazing, two layers with high solar transmitting low-E coatings.

#### ARGON GAS:

Consists of 90% air, 10% argon

The data presented here and in RESFEN are average properties for several commercially available products. Specific products will perform slightly above or below the average products defined here. Users are encouraged to only use these numbers as a general guide and to use specific manufacturer's product data (i.e. NFRC U-factors and Solar Heat Gain Coefficients) whenever possible.